

4913.0 - Pregnancy and Employment Transitions, Australia, Nov 2017

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Summary

Key Findings

PREGNANCY AND EMPLOYMENT TRANSITIONS

Findings from the Pregnancy and Employment Transitions survey in 2017 indicate increased retention of women in jobs following the birth of their child, and women returning to the job they held after longer periods spent with the child over the period 2011-2017. These findings are broadly consistent with a PPL evaluation undertaken by academic experts for the Department of Social Services in 2014.

Key findings from the 2017 Pregnancy and Employment Transitions survey include:

Labour force participation of mothers:

- Less women permanently left the job they were in prior to giving birth (71% stayed in same job in 2011 compared to 77% in 2017);
- Of the women who had started or returned to work, a higher proportion of women returned to the same job with same roles and responsibilities (59% in 2011 versus 65% in 2017).

Working mothers spending longer at home with their newborn

- Of the women who had returned to work since giving birth, there was a higher proportion who reported their child was 7 months or older when they returned (35% in 2011 versus 43% in 2017).

OVERVIEW

In November 2017, there were an estimated 582,300 Australian women aged 15 years and over, who were the birth mother of a child under the age of two years old.

Of these women:

- 42% had started or returned to work after the birth of the child;
- 18% were on leave in November 2017 for the birth of their child, which is higher than those on leave in November 2011 (9%);
- 51% were participating in the labour force, up from 43% in November 2011.

WOMEN WORKING IN A JOB WHILE PREGNANT

The survey found 73% (427,500) of women with a child under two held a job at some stage during their pregnancy. The proportion of women who permanently left the job they held during their pregnancy was 23%, which decreased from 29% in 2011.

Of the women who had a job while pregnant, 48% worked 35 hours or more in their job prior to the birth of their child and 23% of women were working 40 hours or more a week.

PAID AND UNPAID LEAVE

The proportion of women who worked as employees while pregnant and took leave (paid and / or unpaid) was relatively unchanged (93% in 2017 versus 92% in 2011). Of these women, the share who reported taking unpaid leave dropped from 71% in 2011 to 65% in 2017.

STARTED OR RETURNED TO WORK SINCE BIRTH OF CHILD

An estimated 246,700 (42%) women had started or returned to work since the birth of their youngest child. Of those who had returned:

- 74% returned after spending at least 4 months at home with their child (up from 65% in 2011);
- One in four (25%) returned to work after 10 months or longer (up from 21% in 2011).

The majority (82%) of women returned to work with the same employer/business, of those women 79% returned to the same job tasks, roles and responsibilities. The proportion of women returning to work with a different employer/ business decreased from 18% in 2011 to 13% in 2017.

The majority (56%) of women starting or returning to work after the birth of their child relied on informal day care (grandparents, partner, other family members) as their main form of childcare. Grandparent carers were the most popular type of informal childcare, with 26% of women relying on their own parents for the care of their child.

Since 2011 the reliance on formal day care has risen from 33% in 2011 to 44% in 2017. Of those women relying on formal day care facilities, 80% were utilising the services of long day care centres.

END NOTE

Please note, caution should be taken when using the data in this publication. The estimates are derived from a small sample, which means many of the estimates have high Relative Standard Error's.

Please refer to the Relative Standard Error's tab in each Table when using the data.

About this Release

Presents employment transitions information on birth mothers of a child under 2 years of age living with them at the time of interview in November 2017.

In situations where women had more than one child under the age of 2, data was collected

in respect of the employment transitions of women around the most recent birth (i.e the youngest child).

Data collected about women's job during pregnancy; first job started or returned to after the birth; current job details; partners job while the woman was pregnant; partners first job started or returned to after the birth; and partners current job details are cross-classified by characteristics such as income, industry and occupation and demographic characteristics.

The Pregnancy and Employment Transitions Survey was first conducted in November 2005. It was last conducted in November 2011.

Explanatory Notes

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EXPLANATORY NOTES

Please note, caution should be taken when using the data in this publication. The estimates are derived from a small sample, which means many of the estimates have high Relative Standard Error's. Please refer to the Relative Standard Error's tab in each Table when using the data.

Of the 27,000 women who were interviewed in the November 2017 Labour Force survey, less than 5% had children under 2 in the same household. After screening for mothers who had given birth to these children (excluding instances of adoption, surrogacy, foster care, etc) and accounting for non-response, about 4% of the total sample of women (approx. 1000 women) responded to the Pregnancy and Employment Transitions Survey. This small survey sample results in estimates with high relative standard errors (RSEs). In many cases, these RSEs are greater than 25%, which means that the range of possible values in a 95% confidence interval around the estimate is as large as the estimate itself (ie plus or minus 50%). The ABS recommends that extra care should be taken in drawing any conclusions from these estimates.

INTRODUCTION

1 The statistics in this publication were compiled from information collected in the Pregnancy and Employment Transitions Survey (PaETS) survey conducted throughout Australia in November 2017 as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS). The survey collected information from women aged 15 years and over who had given birth to a child less than 2 years ago and were living with that child.

2 Information about survey design, scope, coverage and population benchmarks relevant to the monthly LFS, which also applies to supplementary surveys, can be found in the publication Labour Force, Australia (cat. no. 6202.0).

CONCEPTS SOURCES AND METHODS

3 The conceptual framework used in the monthly LFS aligns closely with the standards and guidelines set out in Resolutions of the International Conference of Labour Statisticians. Descriptions of the underlying concepts and structure of Australia's labour force statistics, and the sources and methods used in compiling these estimates, are presented in Labour

Statistics: Concepts, Sources and Methods (cat. no. 6102.0.55.001) which is available on the ABS website <<https://www.abs.gov.au>>.

SCOPE

4 The scope of the LFS is restricted to persons aged 15 years and over and excludes the following people:

- members of the permanent defence forces;
- certain diplomatic personnel of overseas governments, customarily excluded from the Census and estimated populations; and
- overseas residents in Australia; and
- members of non-Australian defence forces (and their dependants).

5 Students at boarding schools, patients in hospitals, residents of homes (e.g. retirement homes, homes for people with disabilities), and inmates of prisons are excluded from all supplementary surveys.

6 This supplementary survey was conducted in both urban and rural areas in all states and territories, but excluded persons living in Indigenous communities in very remote parts of Australia.

7 Women aged 15 years and over who had given birth to a child less than 2 years ago and were living with that child were included in the survey. The survey excluded:

- women who were members of the Australian permanent defence forces;
- women living in non-private dwellings;
- visitors to private dwellings; and
- all males.

8 In addition, for those women whose partner at the time of interview was not in scope of the survey (e.g. the partner was in the permanent defence forces), the details of the partner's job at November 2017 was not collected. For these partners, job details at November 2017 were classified as could not be determined.

COVERAGE

9 In the LFS, coverage rules are applied which aim to ensure that each person is associated with only one dwelling and hence has only one chance of selection in the survey. See Labour Force, Australia (cat. no. 6202.0) for more details.

SAMPLE SIZE

10 Supplementary surveys are not conducted on the full LFS sample. Since 1994 the sample for supplementary surveys has been restricted to no more than seven-eighths of the LFS sample.

11 The sample for PaETS is a subsample of 26,000 private dwelling households and special dwelling units included in the ABS Monthly LFS in November 2017. The final sample on which estimates are based is composed of 1,030 birth mothers aged 15 years and over, usually resident in these private and special dwellings in Australia, with at least one child less than 2 years of age living with them at the time of interview.

12 In cases where women had more than one child under the age of 2, data was collected in respect of the employment transitions of women around the birth of their most recent child (i.e. the youngest child).

RELIABILITY OF THE ESTIMATES

13 Estimates in this publication are subject to sampling and non-sampling error.

- Sampling error is the difference between the published estimate and the value that would have been produced if all birth mothers of children aged under two years of age had been included in the survey. For further information on sampling error, see the Technical Note.
- Non-sampling errors are inaccuracies that occur because of imperfections in reporting by respondents and interviewers and errors made in coding and processing data. These inaccuracies may occur in any enumeration, whether it be a full count or a sample. Every effort is made to reduce the non-sampling error to a minimum by careful design of questionnaires, intensive training and effective processing procedures.

SEASONAL FACTORS

14 The estimates are based on information collected in the survey month (November) and, due to seasonal factors, may not be representative of other months of the year.

CLASSIFICATIONS USED

15 Country of birth data are classified according to the Standard Australian Classification of Countries (SACC), 2016 (cat. no. 1269.0).

16 From 2013, occupation data are classified according to the ANZSCO - Australian and New Zealand Standard Classification of Occupations, 2013, Version 1.2 (cat. no. 1220.0).

17 Also from 2006, industry data are classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0) (cat. no. 1292.0).

18 Area data (Greater Capital City and Rest of State) are classified according to the Australian Standard Geographical Classification (ASGC), July 2011 (cat. no. 1216.0).

COMPARABILITY OF TIME SERIES

19 Labour Force Estimates have been compiled using population benchmarks based on the 2016 Census of Population and Housing. At the time of publication, this issue's estimates are broadly comparable with the published labour force estimates for November 2017.

20 The Labour Force Survey (LFS) estimates and estimates from the supplementary surveys, (e.g. Pregnancy and Employment Transitions) are calculated in such a way as to sum to the independent estimates of the civilian population aged 15 years and over (population benchmarks). Generally, revisions are made to population benchmarks for the LFS following the final rebasing of population estimates to the latest five-yearly Census of Population and Housing. These population benchmarks are updated quarterly based on Estimated Resident Population (ERP) data. The estimates from previous supplementary surveys are not normally revised to reflect the latest benchmarks, however, we have revised 2011 Pregnancy and Employment Transitions data to incorporate revised benchmarks,

making 2011 comparable with 2017. The revised 2011 data is available in the 2017 Tables.

21. Due to revising benchmarks for the 2011 Pregnancy and Employment Transitions survey and to ensure usability of the data due to the small sample size, some tables which were included in the 2011 survey have been removed, with the data from those tables being collapsed and added to other tables. As a result the number of tables has been reduced from 28 in 2011 to 25 in 2017.

NOTES ON ESTIMATES

22 Paid Parental Leave (PPL) questions were only asked of women who either, worked in a job or business while pregnant, or, who had a job or business they were away from during their pregnancy and did not leave that job before the birth of their child.

23 Women who were employees (excluding owner managers of incorporated enterprises (OMIEs)) have been are classified as 'With paid leave entitlements' if they were entitled to paid sick leave and/or paid holiday leave. In all other cases, employees have been classified 'Without paid leave entitlements'.

24 Full-time or part-time status in job while pregnant after change in hours are calculated on the hours reported by women immediately before stopping work for the birth of child.

25 Other paid leave comprises of paid sick leave and any other type of paid leave, and other unpaid leave comprises of parental leave and any other type of unpaid leave.

26 Information about taking types of paid leave (paid maternity, paid holiday or long service leave) was collected for women who were employees (excluding OMIEs) in the job while they were pregnant, who were entitled to a type of paid leave. If women were not entitled to any sort of paid leave, information about unpaid leave for the birth of their child was collected.

27 Information was collected on any other paid leave taken for the birth of the child for women who were entitled to some sort of paid leave (paid maternity, paid holiday, long service leave or paid sick leave).

28 For all data items relating to personal income of women, partners and other household members, where women either did not know or refused to report:

- their income; data are classified as 'Refusal' for estimates of income, but are included in sources of income;
- partner's income; data are classified as 'Refusal' for estimates of income, but are included in sources of income;
- other household members income; data are classified as 'Refusal' for estimates of income, but are included in sources of income;

29 For data items relating to combined income, for example 'Weekly income of women and partner' or 'Weekly household income', where women did not know or refused to report an individual case of income, then data for that item is classified as 'Refusal'.

30 Additionally for estimates relating to equivalised income, responses that included a refusal or a loss of income, are excluded from these estimates.

OTHER ISSUES FOR ANALYSIS AND INTERPRETATION

31 In analysing and interpreting the PaETS data, users should be aware that women may have difficulty in recalling the circumstances surrounding their employment over the course of a pregnancy (i.e. up to two years prior to interview). As the focus of the survey is women with at least one child less than two years old, some of the information, such as the age of the child when the woman began working after the birth, does not take account of the return to work circumstances of women, whose youngest child was born close to the time of interview, as they may not have returned to work.

Glossary

GLOSSARY

Away from job/business throughout pregnancy

Women who had a job while pregnant, but who were on leave/away from their job or business for the full period of the pregnancy.

Baby Bonus

Baby Bonus was paid by the Australian Government between 2004 and March 2014 to eligible families following the birth of a child or for adopted children who enter the families care before they turn 16 years old. A family could not receive both Paid Parental Leave and Baby Bonus for the one birth or adoption.

Birth mother

The natural mother of a child, i.e. the woman who gave birth to that child. Birth mothers residing with at least one child aged under two years were in scope for this survey.

Born in Australia

Includes persons born in Australia, Norfolk Island and Australian External Territories.

Current main job

The main job which the person is currently employed at.

Contributing family worker

A person who works without pay in an economic enterprise operated by a relative.

Dad and partner pay

A short term payment for dads or partners on leave from work to help care for their new child.

Employed

People aged 15 years and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind, in a job or business or on a farm (employees and owner managers of incorporated or unincorporated enterprises).

- worked for one hour or more without pay in a family business or on a farm (contributing family workers).
- were employees who had a job but were not at work and were:
 - away from work for less than four weeks up to the end of the reference week; or
 - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
 - away from work as a standard work or shift arrangement; or
 - on strike or locked out;
 - on workers' compensation and expected to return to their job.
- were own managers who had a job, business or farm, but were not at work.

Employee

Employed person who:

- worked for a public or private employer; and
- received remuneration in wages or salary on a commission basis (with or without a retainer), tips, piece-rates, or payment in kind; or
- does not operated their own incorporated enterprise.

Employer

A person who operate their own incorporated and unincorporated enterprise and hires one or more employees.

Equivalised household income

Total household income that has been adjusted using an equivalence scale. Equivalence scales are used to adjust the actual incomes of households in a way that enables the analysis of the relative well-being of people living in households of different size and composition. For a household comprising more than one person, it is an indicator of the total household income that would need to be received by a lone person household to enjoy the same level of economic well-being as the household in question. If one or more persons in the household has refused to provide income, the household has been excluded from this category.

The equivalence scale is built up by allocating points to each person in a household. Taking the first adult in the household as having a weight of 1 point, each additional person who is 15 years or older is allocated 0.5 points, and each child under the age of 15 is allocated 0.3 points. Equivalised household income is derived by dividing total household income by a factor equal to the sum of the equivalence points allocated to the household members. The equivalised income of a lone person household is the same as its unequivalised income.

Family

Two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering, and who are usually resident in the same household. The basis of a family is formed by identifying the presence of a couple relationship, lone parent-child relationship or other blood relationship. Some households will,

therefore, contain more than one family.

Family day care

A type of formal care provided in caregivers' homes.

First job started/returned to

The first job in which the person had started or returned to since the birth of child.

Formal care

Regulated care away from the child's home. The main types of formal care are long day care, family day care and occasional care.

Full-time workers

Employed persons who usually worked 35 hours or more a week.

Had a job while pregnant

Women who had a job for some or all of the period during which they were pregnant. This includes women who were away from their job or business throughout their pregnancy.

Household

A group of two or more related or unrelated people who usually reside in the same dwelling.

Incorporated enterprise

A enterprise which is registered as a separate legal entity to its members or owners. Also known as a limited liability company.

Industry

An industry is a group of businesses or organisations that undertake similar economic activities to produce both goods and services. In this publication, industry refers to ANZSIC Division as classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0) (cat. no. 1292.0).

Informal care

Unregulated care either in the child's home or elsewhere. It includes care by (step) brothers or sisters, care by grandparents, care by other relatives (including the other parent) and care by other (unrelated) people such as friends, neighbours, nannies or babysitters. It may be paid or unpaid.

Job

In this survey a 'job' is defined as a set of tasks designed to be performed by one person either:

- for an employer in return for pay, commission or payment in kind; or
- as an operator of an enterprise (either incorporated or unincorporated); or
- when engaging independently in a profession or trade; or

- as a contributing family worker working without pay in an enterprise operated by a relative.

Job held during pregnancy

The main job in which the person was working in before the birth of child.

Job sharing

Job sharing is an arrangement in which two or more people share the one full-time job, each working part time. Job sharing is available in a wide range of industries, and is in place to help employees achieve a balance between work and other aspects of their life.

Leave

Paid or unpaid time away from work taken by employed persons. An individual's specific work arrangements will determine the particular lengths and types of leave to which they have access.

Length of leave

Total amount of paid or unpaid leave or time away from a job for the child's birth and subsequent care until the mother returns or joins the workforce after the birth of the child or until the date of interview. It refers to the total amount of leave taken by the women or partner up until the date of interview.

Long day care

Regulated care that is provided to children in a dedicated centre.

Long service leave

A period of paid leave granted to an employee in recognition of a long period of service to an employer.

Main job

The job in which the person usually works the most hours.

Married

Marital status relates to a 'social marital status' where married is classified as a person who is living with another person in a couple relationship. This relationship is either a registered marriage, or a de facto marriage.

Mean

The mean is the arithmetic average of a group of values. It is calculated by adding the observed values and dividing by the number of observations.

Newborn Upfront Payment and Newborn Supplement

A lump sum and an increase to Family Tax Benefit Part A payment when someone starts caring for a baby or child that's recently come into their care. This replaced the Baby Bonus

in March 2014.

Not in the labour force

People who were not in the categories employed or unemployed as defined.

Occasional care

A type of formal care provided mainly for families who require short term care for their children.

Occupation

An occupation is a collection of jobs that are sufficiently similar in their title and tasks, skill level and skill specialisation which are grouped together for the purposes of classification. In this publication occupation refers to Major Groups as defined by ANZSCO-Australian and New Zealand Standard Classification of Occupations, 2013, Version 1.2 (cat. no. 1220.0).

One parent family

For the purpose of this survey, a family consisting of a lone female parent with at least one natural child aged under two years of age who is also usually resident in the family. The family may also include any number of other dependants, non-dependants and other related individuals.

Other paid leave (women)

For the purpose of this survey, all types of paid leave other than paid maternity leave, paid holiday leave or long service leave.

Other person care

Informal care by people who are not related to the child including friends, babysitters and nannies.

Other relative care

Informal care by relatives of the child excluding parents, not otherwise categorised.

Other unpaid leave

This includes all other types of unpaid leave that has not been stated which the women or their partner took for the birth of child.

Owner managers

People who work in their own business, with or without employees, whether or not the business is in an incorporated enterprise. Comprises owner managers of incorporated enterprises and owner managers of unincorporated enterprises.

Owner managers of incorporated enterprises (OMIE)

People who work in their own incorporated enterprise, that is, a business entity which is registered as a separate legal entity to its members or owners (also known as a limited liability company). These people are classified as employees under 'status in employment'.

Owner managers of unincorporated enterprises (OMUE)

People who operate their own unincorporated enterprise, that is, a business entity in which the owner and the business are legally inseparable, so that the owner is liable for any business debts that are incurred. Includes those engaged independently in a trade or profession. These persons are classified as employers under 'status in employment' if their business has employees, or own account worker if they do not.

Paid maternity leave

Paid leave that a woman receives for the birth of her child. It is generally for a period before the due date and just after the birth of the child. Depending on the woman's workplace, she may be entitled to paid maternity leave for a number of months.

Paid Parental Leave

The Paid Parental Leave scheme provides financial support to eligible working parents of newborn or recently adopted children. If eligible, persons may receive up to 18 weeks of Parental Leave Pay at the rate of the National Minimum Wage.

Partner

For the purpose of this survey, a person who was:

- in a couple relationship with the selected respondent (either a registered or de facto marriage; including same-sex couples); and
- a usual resident of the same household as the respondent; and
- was the same partner during the women's pregnancy.

Part-time workers

Employed persons who usually worked less than 35 hours a week.

Paternity/parenting leave

Paternity/parenting leave is leave provided to employees to care for their newborn child and during the first year of the child's life. Some workplaces offer this paid leave anywhere from 1-14 weeks. This leave does not break continuity of service.

Permanently left job

Ceasing employment in a particular job with no intention of returning.

Public/private sector

The public/private classification is used to identify whether an enterprise is a public or private unit. The public sector includes all government units, such as government departments, non-market non-profit institutions that are controlled and mainly financed by government, and corporations and quasi-corporations that are controlled by government. All other enterprises are classified to the private sector.

Status in employment

Status in employment is determined by an employed person's position in relation to their job, and is usually in respect of a person's main job if they hold more than one job. Employed persons are classified according to the reported relationship between the person and the enterprise for which they work, together with the legal status of the enterprise where this can be established. The groups include:

- Employees
- OMIEs
 - OMIEs with employees
 - OMIEs without employees
- OMUEs
 - OMUEs with employees
 - OMUEs without employees and
- Contributing family workers.

Time away from work (partner)

Time away from work taken by owner managers following the birth of a child. Time away from work will generally be unpaid.

Unemployed

Persons aged 15 years and over who were not employed during reference week, and:

- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or
- were waiting to start a new job within four weeks from the end of reference week, and could have started in the reference week if the job had been available then.

Unincorporated enterprise

A business entity in which the owner and the business are legally inseparable, so that the owner is liable for any business debt that are incurred.

Unpaid maternity leave

Unpaid maternity leave is leave without pay specifically designed so that women can take time off work to care for their child in their first year, without having to permanently leave their job. This period of time away from work does not count as a break in service, as it would for some other types of unpaid leave such as 'leave without pay'.

Usual weekly hours of work

Usual weekly hours of work refers to a typical period rather than to a specified reference period. The concept of usual hours applies both to people at work and to people temporarily absent from work, and is defined as the hours worked during a typical week. The time includes all regular paid and unpaid overtime.

With paid leave entitlements

Employees who were entitled to either paid holiday leave or paid sick leave (or both) in their main job.

Without paid leave entitlements

Employees who were not entitled to either paid holiday leave or paid sick leave, or did not know whether they were entitled to paid holiday leave or paid sick leave in their main job. For more information, see paragraph 24 of the Explanatory Notes.

Women with children less than two years old

The birth mother of a child living in the same household who was under the age of two years at the date of interview. If the birth mother has more than one child under the age of two years, data relates to the pregnancy and work arrangements for the most recent birth.

Worked in a job while pregnant

Women who worked in a job or business for some or all of their pregnancy. This includes women who took paid or unpaid leave and women who had no leave entitlements for the birth depending on their individual employment status.

Quality Declaration - Summary

QUALITY DECLARATION - SUMMARY INSTITUTIONAL ENVIRONMENT

For information on the institutional environment of the Australian Bureau of Statistics (ABS), including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

RELEVANCE

The Pregnancy and Employment Transitions (cat. no. 4913.0) publication presents information on birth mothers of a child living with them for which a child was under two years of age at the time of interview in November 2017. In situations where women had more than one child under the age of 2, data was collected in respect of the employment transitions of women around the most recent birth (i.e. the youngest child).

Data collected about women's job during pregnancy; first job started or returned to after the birth; current job details; partners job while the woman was pregnant; partners first job started or returned to after the birth; and partners current job details are cross-classified by characteristics such as income, industry and occupation and demographic characteristics.

TIMELINESS

The Pregnancy and Employment Transitions Survey (PaETS) is conducted every 6 years as a supplement to the monthly Labour Force Survey. Results from this survey are released the following year after the completion of enumeration.

ACCURACY

Estimates from the PaETS are subject to sampling and non-sampling errors. Relative standard error (RSE) is a measure of the size of the sampling error affecting the estimate, i.e. the error introduced by basing estimates on a sample of the population rather than the full population. Non-sampling errors are inaccuracies that occur because of imperfections in reporting by respondents and interviewers, and errors made in coding and processing data.

This publication was designed primarily to provide estimates at the Australia level. Broad estimates are available for state/territory and/or capital city/balance of state, though users should exercise caution when using estimates at this level because of the presence of high sampling errors. Relative Standard Errors for all estimates are available in the relevant Data Cube. Due to the small sample size, this release has several cells with Relative Standard Errors between 25% and 50%. There are also numerous cells with a Relative Standard Error of greater than 50%. The ABS suggests a greater degree of caution be applied when analysing these data. More information on Standard Errors is available in the Technical Note of this release.

COHERENCE

While the LFS provides the official estimate of persons in the labour force, the PaETs provides further information on the job characteristics of these people who are the birth mothers of a child under 2 years. Summary information is also collected in the Labour Force Survey on a quarterly basis.

The ABS first conducted the PaETS in November 2005. The November 2011 survey collected additional information on women's employment transitions during pregnancy; on starting or returning to work; and job details at November 2011. The survey also collected information on leave arrangements of women and partners for the birth of the child; discrimination in the workplace during pregnancy; work arrangements on return to work; whether women had a partner during pregnancy; and the work transitions of these partners.

Since PaETS was run in November 2011, there has been some significant changes to the Labour Force Supplementary Surveys program. The 2011 Pregnancy and Employment Transitions survey was run in conjunction with Forms of Employment (FOES) and data from FOES was used in PaETS. Changes needed to be made to the 2017 Pregnancy and Employment Transitions to incorporate the relevant FOES items into the questionnaire. The questionnaire used in 2017 can be found under the downloads tab.

INTERPRETABILITY

The Pregnancy and Employment Transitions, Australia (cat. no. 4913) publication contains tables with footnoted data and a Summary of Findings to aid interpretation of the results of the survey. Detailed Explanatory Notes, Technical Note and Glossary also provide information on terminology, classifications and other technical aspects associated with these statistics.

ACCESSIBILITY

Pregnancy and Employment Transitions, Australia (cat no. 4913.0) is released electronically via the ABS website as Data Cubes in spreadsheet format. Additional data may be available on request (subject to data quality). Note that detailed data can be subject to high relative standard errors. Full details of data items for this survey are available from the Downloads tabs in Data Cube: PAETS 2017 Populations and Data item list

For further information about ABS data available on request, contact the National Information and Referral Centre on 1300 135 070 or via email to <client.services@abs.gov.au>.

Data Quality (Technical Note)

TECHNICAL NOTE DATA QUALITY

INTRODUCTION

1 Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all dwellings had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings was included. There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

2 Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

$$\text{RSE\%} = (\text{SE/estimate}) \times 100$$

3 RSEs for Pregnancy and Employment Transitions have been calculated using the Jackknife method of variance estimation. This process involves the calculation of 30 'replicate' estimates based on 30 different sub-samples of the original sample. The variability of estimates obtained from these sub-samples is used to estimate the sample variability surrounding the main estimate.

4 The Excel spreadsheets in the Downloads tab contain all the tables produced for this release and the calculated RSEs for each of the estimates. The RSEs for estimates other than medians have been calculated using the Jackknife method

5 In the tables in this publication, only estimates (numbers, percentages and means) with RSEs less than 25% are considered sufficiently reliable for most purposes. However, estimates with larger RSEs have been included. Estimates with an RSE in the range 25% to 50% should be used with caution while estimates with RSEs greater than 50% are considered too unreliable for general use. All cells in the Excel spreadsheets with RSEs greater than 25% contain a comment indicating the size of the RSE. These cells can be identified by a red indicator in the corner of the cell. The comment appears when the mouse pointer hovers over the cell.

CALCULATION OF STANDARD ERROR

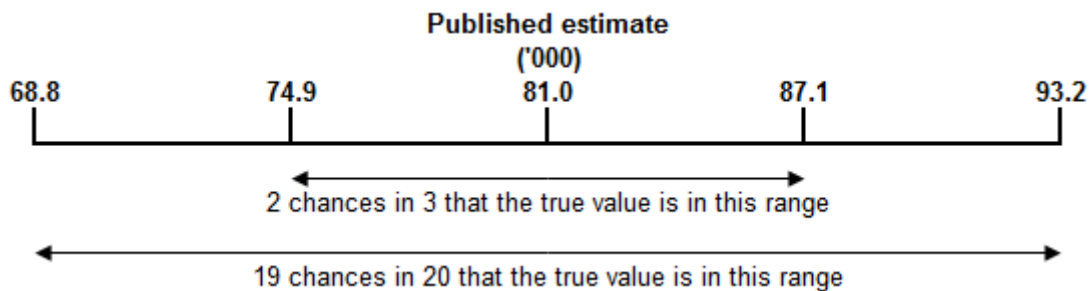
6 RSEs are routinely presented as the measure of sampling error in this publication and related products. SEs can be calculated using the estimates (counts or means) and the corresponding RSEs.

7 An example of the calculation of the SE from an RSE follows. An estimate of females aged 55–59 years who were employed part-time was 81,000, which has an RSE of 7.5%. The SE is:

$$\begin{aligned} \text{SE of estimate} \\ &= (\text{RSE} / 100) \times \text{estimate} \\ &= 0.075 \times 81,000 \end{aligned}$$

= 6,100 (rounded to the nearest 100)

8 Therefore, there are about two chances in three that the value that would have been produced if all dwellings had been included in the survey would fall within the range 74,900 to 87,100 and about 19 chances in 20 that the value would fall within the range 68,800 to 93,200. This example is illustrated in the following diagram.



PROPORTIONS AND PERCENTAGES

9 Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSEs of proportions not provided in the spreadsheets is given below. This formula is only valid when x is a subset of y.

10 Considering an estimate of 1,532,300 females aged 25-34 years who were employed, 1,334,500 or 87.1% were full-time workers. The RSE for 1,334,500 is 1.2% and the RSE for 1,532,300 is 1.0%. Applying the above formula, the RSE for the proportion who were full-time workers:

$$RSE = \sqrt{(1.2)^2 - (1.0)^2} = 0.7\%$$

11 Therefore, the SE for the proportion who were full-time workers was 0.6 percentage points (= (87.1/100) x 0.7). Therefore, there are about two chances in three that the proportion of full-time workers is between 86.5% and 87.7%, and 19 chances in 20 that the proportion was within the range 85.9% to 88.3%.

SUMS OR DIFFERENCES BETWEEN ESTIMATES

12 Published estimates may also be used to calculate the sum of two or more estimates, or the difference between two survey estimates (of numbers, means or percentages) where these are not provided in the spreadsheets. Such estimates are also subject to sampling error.

13 The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x - y) = \sqrt{[RSE(x)]^2 + [RSE(y)]^2}$$

14 The sampling error of the sum of two estimates is calculated in a similar way. An approximate SE of the sum of two estimates (x+y) may be calculated by the following formula:

$$SE(x + y) = \sqrt{[RSE(x)]^2 + [RSE(y)]^2}$$

15 For example, an estimate of females aged 55–59 years who were employed part-time was 81,000, and the SE for this estimate was 6,100. For females aged 60-64 years who were employed part-time was 96,700 and the SE was 5,500. The estimate of the combined age group i.e. females aged 55–64 years who were employed part-time is:

$$81,000 + 96,700 = 177,700$$

16 The SE of the estimate of females aged 55-64 years who were employed part-time is:

$$SE = \sqrt{(6,100)^2 + (5,500)^2} = 8,200$$

17 Therefore, there are about two chances in three that the value that would have been produced if all dwellings had been included in the survey would fall within the range 169,500 to 185,900 and about 19 chances in 20 that the value would fall within the range 161,300 to 194,100.

18 While these formulae will only be exact for sums of, or differences between, separate and uncorrelated characteristics or subpopulations, it is expected to provide a good approximation for all sums or differences likely to be of interest in this publication.

STANDARD ERRORS OF MEANS AND SUMS

19 The estimates of means and sums of continuous variables are subject to sampling variability and random adjustment. As for population estimates, the variability due to sampling and random adjustment is combined into the calculated Standard Error, and the Relative Standard Error is reported. The component of variability arising from sampling is calculated using the Jackknife method.

STANDARD ERRORS OF QUANTILES

20 The estimates of quantiles such as medians, quartiles, quintiles and deciles are subject to sampling variability and random adjustment. As for population estimates, the variability due to sampling and random adjustment is combined into the calculated Standard Error, and the Relative Standard Error is reported. The component of variability arising from sampling is calculated using the Woodruff method. This is also true for Equal Distribution Quantiles.

SIGNIFICANCE TESTING

21 A statistical test for any comparisons between estimates can be performed to determine whether it is likely that there is a significant difference between two corresponding population characteristics. The standard error of the difference between two corresponding estimates (x and y) can be calculated using the formula in paragraph 9. This standard error is then used to calculate the following test statistic:

$$\left(\frac{x - y}{SE(x - y)} \right)$$

22 If the value of this test statistic is greater than 1.96 then there is evidence, with a 95% level of confidence, of a statistically significant difference in the two populations with respect

to that characteristic. Otherwise, it cannot be stated with confidence that there is a difference between the populations with respect to that characteristic.

23 The imprecision due to sampling variability, which is measured by the SE, should not be confused with inaccuracies that may occur because of imperfections in reporting by respondents and recording by interviewers, and errors made in coding and processing data. Inaccuracies of this kind are referred to as non-sampling error, and they occur in any enumeration, whether it be a full count or sample. Every effort is made to reduce non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers, and efficient operating procedures.

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